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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,423	06/24/2003	Brian E. Aufderheide	57778US002	9623
32692	7590	12/13/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			WU, XIAO MIN	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/602,423	AUFDERHEIDE, BRIAN E.	
	<b>Examiner</b>	<b>Art Unit</b>	
	XIAO M. WU	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/2/04, 9/25/03, 3/11/04</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US Patent No. 4,931,019) in view of Robercht et al. (US 2004/0233174).

As to claims 1, 13, 15, 21-22, 34-35, Park discloses a system comprising: a film (32, Figs. 2-5) that self-generates an electrical signal in response to an external agent applied to a location on the film (see col. 3, line 56 to col. 4, line 4). It is noted that Park does not specifically disclose a sensor configured to detect the electrical signal at a plurality of positions on the film to determine the location where the external agent is applied to the film. Robercht is cited to teach a touch panel device including a piezoelectric film similar to Park. Robercht further discloses the touch panel including a plurality of sensors (220A, 220B, 220C, 220D, Fig. 2a) configured to detect electrical signal at a plurality of positions on the film to determine the location where the external agent (e.g. pen) is applied to the film. It would have been obvious to one of ordinary skill in the art to have modified Park with the features of the touch sensors as taught by Robercht so that the touch position on the film can be calculated.

As to claims 2, 14, Robercht discloses a controller (page 4, [0036]) coupled to the sensor and adapted to determine the location where the external agent is applied to the film.

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As to claim 3, Park discloses the external agent comprises a touch implement (18).

As to claim 4, Park discloses the self-generated electrical signal is generated at the location where the external agent is applied to the film ((see col. 3, line 56 to col. 4, line 4).

As to claims 5, 16, 18, Park discloses the film is piezoelectric (32).

As to claims 6, 17, 19, Park discloses the film is pyroelectric (col. 4, lines 32-34).

As to claim 7, Robercht discloses in a touch sensor (220A-220D) to detect a location of an applied touch.

As to claims 8, 20, 31, Park discloses the system being optically transmissive (col. 4, lines 5-10)

As to claim 9, it would have been obvious to have the touch panel being optically opaque. If the touch panel stands alone and not overlay to the display.

As to claims 10-11, Park discloses that the system wherein the self-generated signal is an electric current or a voltage (see Fig. 3).

As to claim 12, Robercht discloses one electrodes disposed on at least one side of the film (see Fig. 5).

As to claims 23-24, Robercht discloses the touch sensor is stressed under the influence of a discrete touch (page 3, [0035]).

As to claim 25. Robercht discloses touch sensor being combined with a display (190, Fig. 1).

As to claim 26, Robercht discloses the touch sensor further comprising one or more electrically continuous electrodes disposed on at least one side of the film (see Fig. 5).

As to claims 27-29, it would have been obvious to have different number of the electrodes on the

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film based on a desired touch sensitivity..

As to claim 30, Park discloses one additional film where each additional film (34) has the property of self-generating a signal in response to the touch implement where the signal generated by each additional film can be generated at the touch location.

As to claim 32, Park discloses using an indium tin oxide electrode (col. 3, line 54).

As to claim 33, Park discloses an optically transmissive conductive polymer (34).

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US Patents 4,745,565, 5,466,895 and 5,801,682 are cited to teach a touch panel device including a plurality of touch sensors.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK EDOUARD, can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.

December 12, 2005



**XIAO M. WU**  
**Primary Examiner**  
**Art Unit 2674**